27 July 1959

MEMORANDUM FOR: Deputy Director (Plans)

Deputy Director (Intelligence)

Deputy Director (Support)

SUBTECT

: Planning Group for Rapid Reporting

System

1. This memorandum reports actions taken and progress made by an Agency Planning Group established by the Deputy Directors. It also contains recommendations for your approval. Such recommendations are contained in paragraph 8 below.

BACKGROUND

2. In November 1958 a Planning Group was formed at your direction to develop proposals for a mechanically integrated system which will increase materially the speed and effectiveness of our intelligence transmissions. The Planning Group, comprised of representatives from all major components having a direct interest in this problem, first conducted a series of briefings on fifteen major topics (which were recorded in written summaries) to provide members with a better understanding of the principal matters with which they were expected to deal. Then a special team was designated to develop a proposed system, employing modern mechanical techniques, to improve and accelerate the flow of intelligence information from field collectors to using analysts.

	REPORTING	SYSTEM
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3. In February 1959 the Reporting System was proposed. Under this system, field stations use Flexowriters (or similar tape-punching typewriters) to originate intelligence reports which thereafter are relayed and reproduced automatically. This speeds transmission and also eliminates manual retyping. Original tapes are mechanically encrypted, transmitted to Headquarters by unaccompanied pouch (or high-speed communications equipment when

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available), and mechanically decrypted and typed. Headquarters processing is greatly speeded up by combining steps and by having separate processing actions proceed simultaneously. Then as a final feature of the system, analysts are required to complete abbreviated "Initial Reaction Sheets" on reports they receive. Organized tabulations of these reaction sheets can be used to tighten dissemination procedures, perfect the use of the Intelligence Subject Code, and eliminate or reduce marginal reporting.

25X1 4. On 27 February the Planning Group reported to the Deputy proposal holds high promise of providing a Directors that the rapid reporting system for the Agency and might well provide the basis for an improved system encompassing other members of the intelligence community. However, it was recognized that a number of technical and procedural problems had to be resolved before any final 25X1 judgment could be made. Accordingly, the Group recommended that a 25X1 pilot model of the system be established at so an actual test of its feasibility could be conducted while further study was being given to technical and procedural problems. This was approved and 25X1 the test began 25 March. 25X,1_{X1} TEST AT RESULTS OF reports were sent 25X1 5. Between 25 March and 30 June, 118 to Headquarters. Average transmission time (from typing 25X1 from to automatic retyping at Headquarters) was 4.9 days. Total 25X1 and receipt by DDI analysts time elapsed between typing in averaged 7.2 days for those reports disseminated. 25X1 est material has been of fairly low priority To date and quality. Hence no effort has been made to "force" the system; it has been allowed to function at a normal pace. However, it is clear that still more time savings are possible, particularly in trans-25X1 to Washington. Even so, the results attained mission from are most encouraging. They stand in sharp contrast to the several weeks normally required to transmit and process CS reports (other than cables) from Munich. 25X1 Organized tabulations have been made of Initial Reaction

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been distributed. However, it is too early to assess their full value.

reports, and these have

Sheets from DDI analysts who received

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PRELIMINARY	CONCLUSIONS	RE	SYSTEM

6. It is clear from results of the test that the system is feasible. From a technical point of view, the system works well and can be made to work even better. The results we hoped for have been attained or clearly could be attained.

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PROBLEMS REMAINING

7. At the same time, however, problems and questions persist which must be resolved before the Planning Group can recommend expanding the system to most stations. These lie principally in the following areas:

a. Equipment

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There are available in the Agency surplus models of two kinds of automatic typewriters which have been considered for system--Flexowriters and M-19 Teletype machines. New models of these machines cost \$2-3,000 per unit. So far, only Flexowriters (of which sixteen are available) have been test, but it is planned to try the M-19 also. The latter will become surplus in fairly substantial numbers as Communications gradually replaces them throughout the world with higher speed Teletype equipment. However, both the M-19 and the Flexowriter have distinct limitations for our purposes -- limitations of speed, security, cost, noise, and other factors. In addition, new equipment now under commercial development will make these and other similar machines completely obsolete in about two years. We therefore believe it unwise to propose the purchase of any significant number of automatic typewriters now being marketed to support a large expansion of the system. Instead, a moderate extension of the system, using available equipment, seems the proper course to pursue until it becomes clear just what machine outht to be acquired for long-term use. This interim period (of about two years) should be used to further refine procedural asjects of the system and to explore technical developments such as photo encryption which can improve or supplement the system for intelligence transmissions.

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Our concept of the automatic typewriter needed for long-term use in the system is a tape-producing machine which will serve a secretary equally well for normal typing and for input into CIA's future communications system with its enormous capacity for transmissions. To obtain such a typewriter, which will also meet our security requirements, we propose to form a small task force of individuals from the components concerned to develop the specifications for the machine and then shop for it among the various commercial suppliers.

b. Security

Tape-producing typewriters present a potential security threat because of power line and radiation signals which emanate during operation. Effective counter-measures have been developed for the M-19 and for the Flexowriter used in the program. And machines now under commercial development can have such protective features included in their basic design. However, the machines must thereafter be protected continually against tampering. This requires their being housed in secure areas and treated with considerable precaution; and only cleared U. S. personnel can be allowed to service and repair them. Both these latter controls will be important factors in considering extension of the system to stations where space and maintenance problems exist.

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c. Cost Analysis

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Experience to date is insufficient to compute equipment and personnel costs associated with any large-scale adoption of the system. The Planning Group believes that more experience in the operational development of the system is needed before this can be done effectively. For such a development phase, we believe the necessary equipment is already on hand and personnel requirements will be very slight.

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RECOMMENDATIONS

8. Having established, in our judgment, the <u>feasibility</u> of the system, the Planning Group recommends:

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25X1	a. The system undergo a period of operational development sufficient to permit valid determinations and recommendations to be made as to its long-term usefulness and application.	25X1
25X1	b. The test link at be continued on a development basis and additional links established at and using Flexowriter facilities available or planned for those stations under the Teletape communicating program.	25X1
25X1	c. M-19 Teletype machines be used as they become surplus, to establish developmental inks at additional stations.	23721
2321	d. Headquarters components whose participation is required in the development of the system be instructed to continue such participation.	25X1
	e. The Planning Group be required to submit a report of progress on or about 31 December 1959.	
	(signed)	
	Chairman, Planning Group	25X1
	The recommendations made in paragraph 8 are approved.	
	Richard M. Bissell, Jr. 30 July 1959 Deputy Director (Plans) Date	
	Huntington D. Sheldon 4 August 1959 Acting Deputy Director (Intelligence) Date	
	H. Gates Lloyd 7 August 1959	
	Acting Deputy Director (Support) Date	No.
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